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3/1/02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PCT International Application of:)
YE-MON CHEN, et al.)
Int. Appl. No. PCT/EP00/08653)
Int. Filing Date: 1 September 2000)
FEED INJECTION SYSTEM FOR CATALYTIC)
CRACKING PROCESS)

1 March 2002

ASSISTANT COMMISSIONER FOR PATENTS
Washington, DC 20231

Sir:

PRELIMINARY AMENDMENT UNDER 37 CFR 1.115

Prior to taking up the case for examination, please amend the application as follows:

IN THE CLAIMS:

Please **CANCEL ALL CLAIMS** (1-14) now in the application and substitute the following **NEW CLAIMS** 15-34 therefor:

- A' -- 15. A nozzle for use in a fluid catalytic cracking unit comprising:
- a first conduit for providing a passageway for enabling a first dispersing gas to flow therethrough;
 - a first cap covering the end of said first conduit, said first cap including at least one outlet passageway therethrough adapted for discharging said first dispersing gas into a liquid hydrocarbon feed material;
 - a second conduit enclosing said first conduit and spaced therefrom to form an annulus therebetween thereby providing a passageway for enabling said liquid hydrocarbon feed material to flow therethrough;
 - a second cap covering the end of said second conduit, said second cap being spaced from said first cap thereby forming a mixing zone therebetween for mixing said liquid hydrocarbon feed and said first dispersing gas and said second cap including at least one circular slot as outlet passageway therethrough, which passageway is substantially aligned